

<b>Appendix: History of SNF PPS Federal Rate Components.....</b>	<b>2</b>
Case Mix.....	2
Standardization of Cost Data .....	4
Computation of National Standardized Payment Rates .....	5

## APPENDIX: HISTORY OF SNF PPS FEDERAL RATE COMPONENTS

### Case Mix

Section 1888(e)(4)(C) of the Act requires that the data used in developing the Federal payment rates be standardized for the effects of case mix.

The Medicare Provider Analysis and Review file (MEDPAR) is an analytical file created from Medicare hospital and SNF claims and maintained by CMS. Although Medicare claim information does not contain all the data necessary to classify SNF patients exactly as they are in RUG-III, it does contain sufficient information to assign Medicare SNF patients to RUG-III categories at the most general level. CMS calls this assignment the RUG-III case-mix analog.

Predictors of patient's resource utilization:

- Clinical characteristics
- Activities of daily living (ADL)
- Skilled services received

The average case-mix for each facility was computed by applying the national case-mix indices, which are based on the staff time measures conducted in 1995 and 1997 through 1995 MEDPAR data for SNFs. These staff time studies identified three main predictors of a patient's resource utilization:

- Clinical characteristics;
- Limitations in the activities of daily living (ADL);
- and**
- Skilled services received

The RUG-III classification system uses these three types of variables to describe SNF patients for the purposes of determining the relative cost of caring for different types of patients (case-mix).

Staff time studies:

- Nursing time
- Therapy services

The staff time studies measured the amount of time required to care for groups of residents for:

- Nursing time over a 24-hour period, and
- Therapy services over the span of a week.

The analog resulted in average case-mix values for each facility in the 1995 cost databases for:

- Nursing and nursing-related services, and
- Therapy services.

This allowed CMS to classify each SNF/swing bed resident into one of 10 RUG-III categories produced by the analog. By applying the case-mix indices applicable to the assigned categories, CMS developed average case-mix index values (nursing and therapy) for each facility.

These index values were used to standardize each SNF's case-mix related cost components by dividing the nursing and therapy components by the related case-mix.

The remaining portions of cost are not case-mix adjusted.

## Standardization of Cost Data

Standardization of Federal rate cost data:

- Case-mix
- Geographic differences in wage levels
- Budget neutral

Section 1888(e)(4)(C) of the Act requires that the cost data used in developing the Federal payment rates be standardized for the effects of case-mix and geographic differences in wage levels. Costs are standardized for geographic differences in wage levels using the hospital wage index.

The standardized cost is calculated by dividing the unstandardized per diem cost by a factor that reflects the wage and case-mix differences. Because these factors are weighted averages of the effects of individual SNF differences in wage levels and case-mix, standardization results in equating average standardized costs, when adjusted for individual facility wage and case-mix differences, and average unstandardized costs.

In this way, the standardization process accounts for the application of individual facility wage index and case-mix adjustments to payments without altering average per diem costs used to construct the basic payment rate. The apportionment of costs into labor-related and non-labor-related components is accounted for in calculating the standardization factors. The average cost values are calculated separately for urban and rural SNFs.

Section 1888(e)(4)(G) of the Act requires that the wage index adjustment to the Federal rates be made in a manner that does not result in aggregate payments that are greater or less than would otherwise be made if the rates were not adjusted by the wage index. This is done through the standardization methodology, which ensures a pure distributional effect in the application of the wage index.

## Computation of National Standardized Payment Rates

Urban areas are those defined by the Office of Management and Budget (OMB) as Metropolitan Statistical Areas (MSAs) or New England County Metropolitan Areas (NECMAs). **All other areas are considered rural areas.**

Unadjusted Federal per diem:

- Compute separately for urban and rural
- Compute per diems for each SNF for 4 components of cost
- Weight each component by SNF Medicare days
- Compute weighted averages for free-standing SNFs and all SNFs
- Compute average of weighted averages

CMS computes separate payment rates for urban and rural SNFs as follows:

**Step 1:** For each facility, compute “nursing” costs and divide by total Medicare days.

**Step 2:** For each facility, compute “therapy” costs and divide by number of Medicare days related to patients receiving therapy.

**Step 3:** For each facility, compute “non-case-mix related therapy” costs and divide by number of Medicare days related to patients receiving therapy.

**Step 4:** For each facility, compute “non-case-mix related excluding therapy” costs and divide by total Medicare days.

**Step 5:** Weight each step by the number of total Medicare days for the SNF.

**Step 6:** Aggregate the weighted components (of steps 1-4) from step five as follows:

- a) For all free-standing SNFs
- b) For all free-standing and hospital-based SNFs

**Step 7:** Divide the four components of a) by the total Medicare days used in step 5 to calculate the four weighted means.

**Step 8:** Divide the four components of b) by the total Medicare days used in step 5 to calculate the four weighted means.

**Step 9:** Take an arithmetic mean of the sum of the weighted means for a) and b) for each of the four components.

The sum of the four components equals the unadjusted Federal rate per diem. By applying the indices calculated earlier, rates are obtained for each of the 44 RUG-III groups. These rates are apportioned between labor related and non-labor-related portions using the national percentages calculated earlier (labor-related 75.379 percent, non-labor-related 24.621 percent).

The final rule, published in the Federal Register, dated July 31, 2001, contains tables that show the rates for each of the 44 RUG-III groups, and the split of the rates between labor-related and non-labor-related portions. It includes the wage indices tables for MSA (urban) and non-MSA (rural) SNFs.

The following items are shown in the tables for each Urban and Rural RUG-III group rate:

- Nursing Index
- Therapy Index
- Nursing Component
- Therapy Component
- Non-Case-mix Therapy-Related Component
- Non-Case-mix Non-Therapy-Related Component
- Total Rate